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Economic Liberalism in Illiberal Regimes: Authoritarian Variation and the Political Economy of Trade[1]

Charles R. Hankla and Daniel Kuthy

Georgia State University

Over the last few decades, a vast literature has emerged examining the relationship between democratic political institutions and trade policy outcomes. While this literature has added significantly to our knowledge, it has effectively ignored policymaking in dozens of important states—those that remain autocratic. This paper fills that hole by exploring the effects of authoritarian variation on national trade policies. Our contention is that more institutionalized authoritarian regimes will tend to adopt more open trade policies. This relationship should hold, we argue, for two distinct reasons. First, we argue that autocratic regimes with larger ''selectorates'' should have greater incentives to provide public rather than private goods. As a result, we expect that multiparty, and to a lesser extent single-party, autocracies will tend to prefer more open trade policies than non-party (often personalistic) dictatorships, monarchies, and military juntas. Second, we contend that more stable autocratic regimes will have longer time horizons and therefore greater incentives to adopt policies, such as trade openness, that may strengthen long-run economic performance. We find strong support for these arguments using several cross-national time-series models of all autocracies ranging from 1962 to 2007 (contingent on data availability).

Over the last few decades, a vast literature has emerged examining the relationship between democratic political institutions and trade policy outcomes. While this literature has added significantly to our knowledge of the politics of commercial openness, it has effectively ignored policymaking in dozens of important states—those that remain autocratic. Despite the recent waves of democratization, it is apparent that authoritarian regimes will not become relics in the near future, so it remains important to improve our understanding of their economic behavior. This paper seeks to do that by drawing on recent scholarship in comparative politics to explore the effects of authoritarian variation on national trade policies.

For the purposes of this study, we define authoritarian regimes as those in which the primary decision makers cannot be removed from power by democratic means. Scholars of comparative political institutions have divided authoritarian regimes into a variety of subcategories, including military juntas, personalistic dictatorships, monarchies, single-party regimes, and multiparty authoritarian regimes (Geddes 1999; Hadenius and Teorell 2007). Our contention is that the more institutionalized types of authoritarian regimes will tend to adopt more open trade policies. This relationship should hold, we argue, for two distinct reasons. First, more institutionalized autocracies will tend to incorporate more dissenting voices into the governing process, increasing the size of their ''selectorates'' (Bueno de Mesquita, Smith, Siverson, and Morrow 2003; Kim and Gandhi 2010). Leaders who must satisfy a large number of constituents in order to stay in power will find it difficult to pay off all relevant political actors through protectionist policies. Instead, such autocratic leaders must look increasingly toward public goods such as free trade, whose effects fall on society widely. As a result, we expect that multiparty, and to a lesser extent single-party, autocracies will tend to prefer more open trade policies than non-party (often personalistic) dictatorships, monarchies, and military juntas.

Second, we argue that more institutionalized autocratic regimes will have longer time horizons and therefore greater incentives to adopt policies, such as trade openness, that may strengthen long-run economic performance. The positive effects of free trade tend to be more dispersed across society and are less likely to be immediately felt by many people within a country. Free trade, however, can have long-term positive effects on a country's economy that leaders that are more secure in their positions would be interested in achieving. Therefore, we argue, more stable regimes will be better able to pursue a more liberal approach to trade because, unlike a regime that is more vulnerable, they can afford to wait for the benefits of such policies. We find strong support for both of our arguments using several cross-national time-series models of autocracies from 1962 to 2007 (contingent on data availability).

Our investigation contributes to existing research in two ways. First, it fills a gap in the literature on domestic institutions and international trade by looking at variation in trade policy among different authoritarian regimes. Second, it extends past research into how the variation in authoritarian institutions affects policy outputs into the understudied area of trade policy. Our article proceeds in the following manner: first, we provide a review of the separate literatures on trade policy and authoritarian variation, both of which provide insights that we incorporate into our own argument. We follow this review with an explication of our theory and our general expectations. Next, we describe our statistical models, interpret our results, and finally discuss how they address questions in the field.

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Trade Policy and Political Institutions

Scholars of trade policy have long debated whether democracy or autocracy is better for trade, with many authors finding an association between representative political institutions and liberal policies. Some researchers, making an essentially monadic argument, attribute this relationship to the larger constituency size of democratic governments. For example, Milner and Kubota (2005) find that democracies in the developing world tend to have more liberal trade policies than autocracies because their larger selectorates empower free trading labor interests. Other scholars claim that the link between democracy and free trade is primarily the effect of dyadic relationships between democracies, which tend to have higher levels of trade with one another than with authoritarian regimes (Mansfield, Milner, and Rosendorff 2000; Bliss and Russett 1998; Russett and Oneal 2001; Morrow, Siverson, and Tabares 1998). Still others have reservations that there is a clear association between democracy and free trade at all. According to Kono (2006), for example, democratic governments face pressures from both interest groups demanding protection and publics that on average prefer more liberal trade policies. These cross-cutting pressures lead them to choose lower tariff levels than autocratic governments, but to make greater use of non-tariff barriers that are less visible to the public (and often to scholars).

In addition to comparisons between democratic and authoritarian regimes, scholars have looked at how variance in the political institutions of democracies affects their trade policies. For example, a number of authors have found that the relative insulation from interest groups provided by different democratic institutions can have a significant impact on the degree of national trade liberalization. The specific institutions that past researchers have associated with free trade include a proportional electoral system (Rogowski 1987), unified party government across executive and legislature (O'Halloran 1994), low party fragmentation in the legislature (Haggard and Kaufman 1995), centralized political parties (Nielson 2003; Hankla 2008), a low number of institutional access points for lobbyists (Ehrlich 2007), and stable linkages between parties and voters (Hankla 2006).

Authoritarian Regime Variation

Researchers have been developing autocratic regime classifications for years, beginning with an effort to distinguish authoritarian from totalitarian systems (Arendt 2009 [1951]; Friedrich and Brzezinski 1965). Over time, these classifications have become more sophisticated and have allowed scholars to understand the dynamics of various types of autocracies, from single-party dictatorships to military juntas and from traditional monarchies to personalistic regimes.

Many authoritarian regimes incorporate seemingly democratic features, such as legislatures and multiparty elections. Political scientists are beginning to challenge the pre-existing consensus that such institutions are meaningless propaganda and are investigating what functions they might serve (Gandhi 2008; Gandhi and Przeworski 2006; Diamond 2002; Brownlee 2009). To take a prominent example, Gandhi (2008) argues that legislatures in autocratic and hybrid regimes perform the vital function of facilitating bargains between the regime and opposition leaders. They can also improve the stability of more broadly based authoritarian governments by incorporating powerful actors into the policy-making process.

If authoritarian institutions matter, then, how do they affect policy outcomes under dictatorship? A new but rapidly growing literature explores this question. For example, in a study of the distributional policy of authoritarian regimes, Gandhi and Przeworski (2006) find that those that had limited multiparty legislatures were more likely to make policy concessions to various social groups because these institutions provide a convenient forum for making bargains. Likewise, Kim and Gandhi (2010) argue that more institutionalized autocratic regimes are better able to maintain labor peace by incorporating the interests of workers into the governing process.

Perhaps the most thoroughly researched question taken up by this new literature concerns the effects of authoritarian institutional variation on economic growth. Quinn and Woolley (2001) find that autocracies tend to be less risk-adverse in their economic policies in comparison with democratic regimes, producing more volatility and variation in their growth rates. But how do authoritarian states compare among themselves? Gandhi (2008) finds that autocracies that make use of quasi-democratic institutions such as parties and legislatures tend to have higher economic growth rates than those that do not. This is because, she argues, such institutions contribute to greater transparency and policy stability in the regimes where they exist. Wright (2008a) qualifies this argument by distinguishing between legislatures that constrain autocratic leaders, associated with regimes that rely on domestic investment, and those do not, associated with regimes that rely more on natural resources. Only when autocracies possess legislatures with the power to restrain executive action, he argues, will such institutions promote growth. Pepinsky (2008), on the other hand, finds that autocratic states that rely for support on businesses with varying levels of capital mobility will have a difficult time crafting a coherent response to economic crises.

Our Theory: Authoritarian Regime Types and Trade

Despite the remarkable progress of democratization in the past several decades, many countries in the world remain under authoritarian rule. According to the most recent Polity IV data, 95 out of the 164 countries that they track qualify as democratic with a score of 6 or better. That leaves 69 countries, more than one-third, that are ruled by authoritarian or quasi-authoritarian regimes, a number that almost certainly understates the number of nondemocracies in existence (Marshall and Jaggers 2007). Since it seems likely that authoritarian regimes will continue to exist for quite some time, it is important to understand how they function, including how different institutional arrangements within autocracies affect policy outcomes. We seek to address part of this question by looking at trade policy within different types of authoritarian and quasi-authoritarian regimes.

Our overall argument is that more institutionalized authoritarian states will tend to choose freer trade policies. By institutionalization, we mean the participation of quasi-democratic institutions such as political parties in the governing process, along with the incorporation of a wider variety of social actors into policymaking. The relationship between institutionalization and free trade

should hold for two reasons. First, we argue, more institutionalized regimes will tend to incorporate more social actors into policymaking, expanding the incentives for dictators to provide public goods such as free trade. Second, institutionalized regimes will tend to be more stable, a fact that will lengthen their time horizons and encourage them to pursue policies, such as free trade, that can have long-run economic benefits.[2]

To develop our first argument, we draw on the comparative politics literature for our understanding of authoritarian regime types and on the trade literature for insight into how social preferences are aggregated under different political institutions. We also make use of the selectorate theory of Bueno de Mesquita et al. (2003). This approach to understanding politics begins with the assertion that both democracies and autocracies must rely on portions of society for support in order to stay in power. All individuals or groups that play a role in choosing the government are members of what Bueno de Mesquita and his coauthors term the selectorate. In a democracy, the selectorate is the same as the electorate and includes all voters, but in an autocracy, the selectorate can comprise, for example, the military, the business elite, the party central committee, or some other group.

Bueno de Mesquita and his coauthors term the portion of the selectorate that governments must win in order to stay in power the winning coalition. The vital support of this winning coalition can be secured by providing its members either private or public goods. Private goods are those benefits that are specifically directed to an individual or small group, while public goods are those that benefit society more broadly.

In a related argument, Ronald Wintrobe (1998) explores the calculations of authoritarian leaders by placing their decisions on extraction and distribution in a political economy framework. He explains that in making decisions, dictators, in order to remain in power, must make enough payoffs to individuals in order to sway their calculations in the direction of supporting, or at least not opposing, the dictator's rule. While some of these payments must be made to citizens broadly, the most critical groups to satisfy are those on which the dictator directly relies for power.

Drawing on these insights, we argue first that authoritarian regimes that rely on a larger selectorate in order to remain in power will, on average, favor more open trade policies than regimes with relatively limited selectorates. With regard to trade policy, there are two main approaches that a government can take in order to increase its chances of staying in power. It can either attempt to protect enough industries in order to buy off key supporters, or it can pursue a more liberal trade policy that benefits the population more broadly. The logic behind the first approach is straightforward. If certain groups in society that would prefer protection for their particular business sectors receive favorable policy concessions, they are more likely to support the government.

The second approach is somewhat less direct, and it operates under the understanding of free trade as a public good. Perhaps the most basic finding of neo-classical trade theory is that countries gain by specializing in the production of goods for which they have a comparative advantage and then trading those goods on international markets. Free trade, of course, has losers, but its benefits tend to be greater than its drawbacks in the aggregate. As a result, free trade is in some ways a public good, one that provides benefits to society as a whole.

We argue here that autocratic leaders with large selectorates will find it increasingly difficult to pay off key supporters through protectionist trade policies. Because of the large number of interests that would need to be protected, following such a strategy would require a broad closure of the economy to foreign trade, which could have significant costs to economic growth. Broad protectionism could also (i) invite retaliation on the part of trading partners, angering exporters, (ii) raise the price of intermediate goods, angering domestic producers, and (iii) raise the price of consumer goods, potentially producing unrest and popular resistance. In a more closed autocracy with a smaller selectorate, key supporters could be bought off with limited protectionism and the minor economic disruption that results could be absorbed by politically important actors. But, when selectorates are large, the scale of protectionism needed to stay in power becomes crippling, and the probability that this protectionism will hurt politically relevant actors becomes a real concern. As a result, free trade provides a more rational approach to leaders of more liberal autocracies because it offers a simple way of benefiting large numbers of supporters without the negative economic consequences of autarchy.

This argument holds most clearly in a world of mobile factors, as described by the Heckscher–Ohlin model and its Stolper–Samuelson corollary. In such a world, abundant factors prosper under free trade. As nearly all autocratic countries are in the developing world, labor is their abundant factor and should therefore prefer open borders. It stands to reason that, as a regime's selectorate grows, so too will the power of labor and, with that power, pressures to liberalize commerce. A similar point has already been made by Milner and Kubota (2005) in their comparison of democracies and autocracies in the developing world.

The argument also holds in a world of specific factors, the core assumption of the Ricardo–Viner models, although perhaps less universally. When land and capital are immobile, free trade benefits workers and investors in export competitive industries and hurts those in import competing industries. At the same time, it benefits consumers and those in non-tradables by lowering the cost of goods. While a small-selectorate regime beholden to exporting interests might have a stronger preference for free trade than a larger selectorate regime that also incorporates import-competing industries, the general trend should be a clear association between regime liberalization and trade liberalization. As discussed above, regimes with large selectorates will find buying support with trade protection to be highly costly both economically and politically, as such a policy could impede economic growth while alienating consumers and those associated with exporting and non-tradable industries. Free trade should therefore be a more attractive choice.

An additional reason that authoritarian regimes with larger selectorates may prefer freer trade policies relates to taxation.[3] It is likely that the most politically restrictive autocracies may have difficulty achieving the

[2] It is worth noting that institutionalized autocracies are not automatically more inclusive or stable. Nevertheless, as noted above, much of the literature draws a link between institutionalization, stability, and inclusiveness. Kim and Gandhi (2010), for example, make a similar argument to the one here that relates institutionalization to labor quiescence in autocracies. In addition, we measure stability and inclusiveness directly in our empirical models.

[3] We thank an anonymous reviewer for this insight.

''quasi-voluntary compliance'' necessary to collect taxes in a cost-efficient manner (Levi 1988). As a result, small-selectorate autocratic regimes may be more dependent on tariffs for revenue than are large-selectorate regimes, which can rely on more developed institutions to mobilize capital through taxes.

Which authoritarian regimes are most politically liberal? Among the authoritarian regime types often identified in the literature, multiparty, and to a lesser extent single-party, regimes will tend to have the largest selectorates. Therefore, we argue that multiparty and single-party authoritarian regimes will have more open trade policies than other authoritarian regime types, other things equal. More specifically, in the Wright–Geddes data (discussed below), the coding is divided into four categories: single-party, military, monarchist, and personalist regimes. In the tests using these data, we expect that single-party regimes will tend to have more liberal trade policies than other authoritarian regime types. For the tests using the Hadenius and Teorell data, we expect that multiparty regimes will tend to have more liberal trade policies in comparison with any of the other four regime types (single-party, military, monarchy, and personalist regimes).

The second component of our institutionalization argument is that regime stability encourages free trade policies in authoritarian systems. More institutionalized autocratic regimes are better able to co-opt dissent and should therefore tend to enjoy longer and more stable tenures. As a regime's stability increases, the time horizons of its authoritarian leaders will also grow longer. These longer time horizons, in turn, produce powerful incentives to enact policies that will benefit the country's economy in the long run rather than just shore up support for the leadership in the immediate future. As Olson (1993) has argued, even kleptocratic dictators have good reason to maintain the health of their national economies, if only to provide sources of future loot. By contrast, authoritarian leaders sitting atop unstable regimes and fearing removal will not be thinking about the long-term future. Instead, their focus will be providing immediate benefits to their supporters in order to remain in power. As a consequence, the leaders of more stable autocratic regimes will be more likely to provide the public good of free trade, while those whose hold on power is precarious will tend to rely on particularistic goods such as protectionism to keep their winning coalitions intact.

This argument follows the logic presented by Hankla (2006) on time horizons and trade policy decisions in democracies, except that we are concerned here with authoritarian stability rather than electoral volatility. It is also similar to the argument developed by Wright (2008b) linking long time horizons in authoritarian regimes to the effectiveness of foreign aid (a rare piece of research exploring the policy implications of regime stability under dictatorship). Indeed, the prospects for stability to matter are perhaps greater in authoritarian regimes than in democracies, because for ruling groups in these regimes, losing power often results in death or imprisonment. Therefore, the pressure for protectionism in an attempt to gain short-term support in new or unstable regimes is likely to be even greater for authoritarian governments than for those in a democracy. Additionally, truly stable authoritarian regimes tend to have individual leaders with very long time horizons (far beyond those of stable democratic leaders), providing them with stronger incentives to choose policies, like free trade, that may contribute to long-run economic growth.

Seeking to understand trade policymaking in authoritarian regimes is all the more pressing because so few others have spent time on the issue. It is worth taking a moment, however, to consider two rare articles that touch on trade policymaking under autocracy. Frye and Mansfield (2003) argue that regime type is not as important an indicator of trade openness as the number of veto players with influence over policy change. They find that, in postcommunist Eastern Europe, both democracies and autocracies with more veto players also enjoyed freer trade. This link, they believe, is a product of incorporating a wider variety of voices into policymaking, thereby reducing the ability of governments to depend on patronage to stay in power. While Frye and Mansfield make an important contribution to our understanding of how trade policy is made under autocracy, they focus their attention only on Postcommunist Eastern Europe and they do not address the role of regime stability. Our goal in this article is to take the next step by developing and testing a general theory of trade policymaking in authoritarian regimes.

In a similar vein, Milner and Kubota (2005) contend that, among developing countries, democracies will tend to choose freer trade policies than autocracies because democracy increases the power of labor interests. These interests, in a Stolper–Samuelson context, will be supportive of free trade in poorer, labor-abundant countries. Empirically, Milner and Kubota find that personalistic dictatorships, with their smaller selectorates and weaker labor interests, have more closed trade policies than single-party authoritarian regimes and democracies. Milner and Kubota's research has considerably expanded our understanding of trade policy in different regimes, and their findings go farther than any before in relating authoritarian variation to trade outcomes. That said, their research focuses primarily on the democracy–autocracy split and considers differences among authoritarian regimes themselves only as a robustness test. In our theory development, we focus entirely on authoritarian regimes and incorporate the concept of regime stability, something not considered by Milner and Kubota. We also develop a broader selectorate argument than they do, one that we believe should hold in both a Stolper–Samuelson and a Ricardo–Viner world. As noted above, our argument hinges on the incentives of autocrats to provide public goods when they enjoy long time horizons and face a broad selectorate. This is related but distinct from Milner and Kubota's focus on the incorporation of labor interests into decision making in developing countries. Empirically, we look only at autocratic regimes in our models, while Milner and Kubota use only pooled models. We also control for a country's polity score as a way of isolating the effects that we emphasize from those highlighted by Milner and Kubota. As we discuss in the empirical section, we find evidence both for a general democratization effect and for the specific impact of regime type and stability.

To summarize, therefore, we hypothesize that more institutionalized autocratic regimes will have more liberal trade policies, other things equal. This overarching hypothesis has two more specific components:

Hypothesis 1a: *Authoritarian regimes with larger selectorates (that is, multiparty and, to a lesser extent, single-party autocracies) will have more liberal trade policies than smaller selectorate authoritarian regimes (that is, monarchies, non-party dictatorships, and military juntas), other things equal.*

Hypothesis 1b: *More stable authoritarian regimes will have more liberal trade policies than less stable authoritarian regimes, other things equal.*

Data and Methods

In order to test the arguments presented in this paper, we estimate several cross-sectional time-series models of autocracies. For robustness, we operationalize authoritarian regime type using two different data sets—Hadenius and Teorell and Wright–Geddes (Wright 2008a; Hadenius and Teorell 2007). For our primary model, which uses the Hadenius and Teorell data, we include four dummy variables in the analysis—*Single Party*, *No Party*, *Monarchy*, and *Military*—and exclude multiparty regimes as our reference category.[4] We expect each of these four variables to be associated with protectionism vis-à-vis multiparty autocracies, as our theory anticipates that multiparty regimes, with their relatively large selectorates, should have the most open commerce. For our robustness checks using the Wright–Geddes data, we include a dummy variable in our models measuring single-party regimes (*Single-Party Wright*), which we expect to be associated with more open trade vis-à-vis the remaining categories in the data set (monarchy, military, and personalistic).[5] To increase our observations, we extend the Wright (2008a) data set, which is itself an extension of Geddes (1999), from 2004 to 2007 using the same criteria for evaluating regime types. We also make use of the *Party Number CGV* variable, which is the *lparty* variable coded by Cheibub, Gandhi, and Vreeland (2010), as an alternate measure of selectorate size. This variable measures the number of parties in a country's legislature and is coded ''0'' when there are no parties or no legislature, ''1'' when there is one party or multiple regime parties, and ''2'' when there are multiple parties.

For our primary model, which uses average statutory tariffs and the Hadenius and Teorell variables, we examine all autocracies from 1980 to 2000, with a number of observations missing due to data availability. Our most encompassing model uses the Hadenius and Teorell data and differenced trade openness as a dependent variable; this model examines all autocracies with available data from 1973 to 2006 and considers well over 2000 N's.

In order to exclude democracies from our sample, we omit any observation that is not coded as autocratic in Hadenius and Teorell for our models using those data, and any observation not coded as autocratic by Wright–Geddes for our models using those data. In both sets of models, we also omit autocratic regimes coded as ''mixed'' or ''other''.[6]

To test the second component of our hypothesis—that the greater the level of stability in a country, the more liberal its trade policy will tend to be—we measure the longevity of both the governing regime and the particular government in power. All of our models use measures of the duration of the particular authoritarian regime subtype categorized above in a given country, with the expectation that within these regime types, transitions of power can happen in relatively peaceful manners that will not necessarily change governmental policy. For the Hadenius and Teorell models, we also look at the tenure of the particular leader or set of leaders in a country in order to test the idea that this stability may be directly tied to the leader, rather than the regime in general.[7]

For the Hadenius and Teorell models, we use non-tariff barrier (measures taken from that data set. To measure regime stability, we use *totdur1ny*, which we term *Regime Duration* and which measures the total number of years that the regime type (multiparty, single party, no party, military, and monarchy, as above) has existed in the country, backdated to 1960. And to measure the duration of an individual leader's or government's term, we use *tenure1ny* (which we term *Leadership Duration*), coded as the total regime duration in years divided by the number of changes of the executive. For robustness, we also use data on leadership duration from the Archigos data coded by Goemans, Gleditsch, and Chiozza (2009). This variable measures the lagged total leader years in power and therefore (unlike the Hadenius and Teorell coding) varies across time for the same leader. For the Wright–Geddes models, we reconstruct the regime duration variable using the regime classification adopted by Wright–Geddes and the coding rules used by Hadenius and Teorell and call it *Regime Duration Wright*. There were insufficient data to compute the leadership duration variable for the Wright models. We lag all of our political variables by 1 year.

The Dependent Variable

Measuring trade protection can be rather complicated, and any measure has potential problems. In order to ensure the robustness of our results, we use measures that account for both trade volume generally (trade openness) and the trade policies of governments more specifically (average statutory tariffs, import duty coverage ratio (IDCR), and ''open'').

For our primary dependent variable, we use a country's average statutory tariff rates, the mean level of tariffs across all categories of goods imported into a country. This variable has the benefit of measuring trade protection both directly (unlike trade openness, see below) and independently of overall levels of trade (unlike IDCR, see below). The major downside of the measure, which comes from the World Bank (2003), is that the data are not available for every country-year.

As a robustness test, we also make use of trade openness as a dependent variable, measured by dividing the sum of a country's imports and exports by its gross domestic product (GDP). By looking directly at trade out-

[4] These variables should pick up on differences in the existence and openness of the quasi-democratic institutions that comparativists have identified as important. While single-party and multiparty autocracies will generally have functioning legislatures, for example, such institutions will be less universal, and certainly less open, in the other systems. The presence of legislatures is also more directly coded in the *Party Number CGV* variable, discussed below.

[5] Note that the Wright–Geddes data do not code for multiparty regimes as a separate type, pooling most of them into the single party variable. Note also that most communist regimes from the pre-1989 period are missing from the models due to lack of data. For that reason, most regimes coded *Single Party Wright* are non-communist dictatorships, many of them socialist or nationalist regimes that have co-opted labor in their rise to power. As discussed below, we include a control variable for the leftist orientation of regimes to deal with any complications due to regime ideology.

[6] Note that this approach includes a few regimes that score above the usual democratic threshold on the polity score, although none that score a perfect ''10''.

[7] One objection is that we should be measuring the duration of regimes themselves, rather than the broader concept of regime type duration or the narrower concept of leader duration. This is a legitimate problem in some cases, although in most systems we believe that the combined measures of regime type and leader duration will pick up on the necessary variation. In any case, measuring regime duration independent of regime type and leader duration would be subjective and difficult to do empirically.

Table 1. Dependent and Lagged Dependent Variables

Variable	*Computation Method*	*Mean*	*Range*	*SD*
Statutory Tariff	Average tariff level for all sets of goods	21.93	0 to 102.2	14.70
Trade Openness (differenced)	100*(Total value of all imports and exports/GDP) for year T − 100*(Total value of all imports and exports/GDP) for year T − 1	0.8324	−99.07 to 121.36	11.78
Trade Openness (lagged)	100*(Total value of all imports and exports/ GDP) for year T − 1	68.84	1.53 to 447.30	40.92
Import Duty Coverage Ratio (differenced)	(Total value of duties collected/value of imports) for year T − (Total value of duties collected/value of imports) for year T − 1	−0.057	−49.97 to 78.57	5.28
Import Duty Coverage Ratio (lagged)	(Total value of duties collected/value of imports) for year T − 1	15.20	0 to 368.70	24.87
Open	Coded 1 if country possesses a open economy, based on NTBs, tariffs, exchange rates, and market orientation	0.278	Dummy	0.448

comes, we can see the impact not only of tariffs, but also of non-tariff barriers that can be important determinants on the volume of trade. In addition, trade openness has the great advantage that data are available for more country-years than for any other measure. That said, there are drawbacks to using a trade outcome variable to operationalize government policies. If we simply measure the level of a country's international trade, we cannot necessarily discern whether higher levels are the result of government policies or general features of the country, such as wealth or region. For this reason, we include a number of control variables, mentioned below, in order to distinguish the effects of changes in trade policy from broader economic shocks.

The third metric that we use, IDCR, provides a direct measure of government policies with respect to trade. The IDCR is calculated by dividing the total value of import duties that a country collects by the total value of its imports. While IDCR cannot account for the effects of non-tariff barriers on trade, it is a straightforward, widely available, and well-respected measure of trade protection that directly accounts for government trade policies. We take the data for both trade openness and IDCR from the World Bank (2008).

Our final indicator of trade policy, also used as a robustness test, is the ''open'' variable developed by Sachs and Warner (1995) and expanded by Wacziarg and Welch (2008). This is a dichotomous indicator, coded ''0'' for closed when any of the following hold: (i) NTB coverage is >40%, (ii) average tariffs are >40%, (iii) a black market exchange rate is depreciated by 20% relative to the official rate, (iv) a socialist economy exists, or (v) there is a state export monopoly. The variable captures many different aspects of protectionism, but as a dummy variable, it is quite blunt. It does, however, have the benefit of being available from 1950 to 2001.

To estimate our statutory tariff, trade openness, and IDCR models, we make use of random-effects regression, an approach that allows us to estimate more fully variation within and across panels in the data set.[8] In addition, for both our trade openness and IDCR models, we employ an error correction model (Baltagi 2000). By using this model, we solve the econometric challenge of non-stationarity in the IDCR and trade openness variables by differencing them. We also gain the advantage of including our control variables in both lagged form (to measure long-term effects) and differenced form (to measure short-term effects). We include our primary variables only in lagged form because, as mentioned above, they change very little across time.

As the statutory tariff variable does not trend, it is less critical to estimate it in an error correction framework; there is no need to difference the variable to eliminate non-stationarity. In addition, differencing the variable would exacerbate the problem of missing observations, which is particularly serious with this variable. Therefore, we use a more standard random effects model for average statutory tariffs, but we also present OLS with panel-corrected standard errors and a lagged dependent variable as a robustness check.[9] For the ''open'' models, we use panel logit with random effects because the dependent variable is dichotomous.

Following the normal specification of error correction models, we include the lagged level of trade openness and IDCR in order to control for autocorrelation, and we also make use of robust standard errors. In most of our statutory tariff models, we control for autocorrelation using the xtregar function in Stata instead of lagging the dependent variable, because doing so would reduce our observations significantly due to missing data. We control for time effects in our ''open'' logit models with decade dummy variables. Below are summary statistics for the different metrics used in this study to measure the dependent variable (Table 1).

Control Variables

In addition to the main independent variables used in the study, we include a number of lagged and differenced variables to control for potentially confounding factors. These controls include variables that measure government ideology, national income, the results of external interactions, and regional variables.

Both overall levels of national income and changes in a country's economic situation can have a profound effect on many outcomes, including government trade policies. In our model, we include a lagged measure of a country's overall GDP with the expectation that smaller countries are more likely to have an open trade policy. A measure of GDP per capita is included to account for development status, with the expectation that wealthier countries will generally be more inclined to have liberal

[8] Hsiao (1986). Because many of our independent variables change little across time, a more robust fixed effects approach is not warranted.

[9] Note that we use a pairwise rather than a casewise approach to the PCSE models due to gaps in the data.

trade policies. In the error correction models, we also look at the change in GDP and GDP per capita from 1 year to the next with the expectation that in times of low economic growth or economic retraction, governments will be more likely to adopt more restrictive policies than they would in more prosperous times. The data for these variables come from the World Bank (2008).

Using data from Beck, Clarke, Groff, Keefer, and Walsh (2001), we also control for the ideological orientation of autocratic governments, although the impact of this variable on trade policy outcomes continues to be much debated in the literature. Because the relative value of a country's currency internationally can significantly affect its trade competitiveness, we include a lagged measure of the yearly percentage change of each country's exchange rate relative to the US dollar. The data come from the World Bank (2008). Appreciation of a country's currency can potentially make its exports less competitive with foreign goods, thus increasing pressures for trade protection.

We include a measure of the average trade protection in each state's region to control for the effects of regional history and culture. We expect, in general, that countries that are in regions with higher levels of trade protection will have higher levels of protection themselves. We use average regional statutory tariff for the statutory tariff models, average regional trade openness for the trade openness and ''open'' models, and average regional IDCR for the IDCR models.[10] Each of these variables changes across both regions and years.

In addition, we look at foreign aid as a variable that potentially affects the trade policies of a country. In order to control for this effect, we include both lagged and differenced measures of foreign aid as a percentage of gross national income. The expectation is that countries with high levels of foreign aid as a percentage of their income will have less restrictive trade policies, largely because of the free market conditions that may be attached to aid. In addition, increases in the levels of foreign aid as a percentage of income should generally lead to more liberal trade policies, whereas decreases should be more likely to result in more protectionist policies. These data come from the World Bank (2008). We include only the lagged levels of the above variables for the average statutory tariff and ''open'' models, as these are not error correction models with a differenced dependent variable.

Finally, as a robustness check, we estimate statutory tariff models including variables for energy production and for democratic characteristics. The first of these variables, *Lagged Energy Production*, measures the natural log of the total energy production of a country in kilotons of oil equivalent (World Bank 2008). We include it to control for rentier state effects, as energy-exporting autocracies may have incentives to adopt open trade policies to facilitate the purchase of consumer goods with their oil revenues. The second of these variables, *Lagged Polity*, is measured using the familiar polity data set (Marshall and Jaggers 2007). We include it to control for the possible effects of the non-institutional democratic characteristics of these autocratic regimes, such as competitiveness and executive recruitment. We also use it to distinguish between our theoretical focus and that of Milner and Kubota (2005), who relate trade liberalization in developing countries to democratization. Of course, this variable also picks up on institutional characteristics, so it should depress the significance of our primary variables. A summary of the statistics for the independent variables used in these tests and their expected effects on the level of trade protection are provided in Table 2 below.

[10] In order to avoid taking the average of a dummy variable, we do not make use of a regional ''open'' variable. Instead, we use average regional trade openness in the open models (Models 12 and 13 below), although the primary results presented in these models also hold when average regional IDCR and, partially, when average regional statutory tariffs are used. Including an average of the ''open'' dummy would weaken but not entirely eliminate the results due to the very strong relationship between that average and the dependent variable.

Results

We present our results in Tables 3 and 4. Table 3 represents our findings using the average statutory tariff dependent variable, including both our primary model and robustness tests, whereas Table 4 represents our results using the differenced trade openness, differenced IDCR, and ''open'' dependent variables. Overall, our findings provide strong support for the hypothesized relationships discussed earlier between selectorate size and stability in autocracies on the one hand and trade policy on the other. First, as expected, multiparty regimes tend to have significantly more open trade polices than other forms of autocracy. Beginning with Model 1 from Table 3, our primary model, the military and single-party variables are both significant and negatively signed, indicating that each of these regime types tends to have higher statutory tariffs than multiparty autocracies, the reference category. The predicted effect varied with regime type and ranged from a 7.95% increase in tariffs for military regimes (nearly half a standard deviation) to a 5.20% increase for single-party regimes.

Turning to the tests of the second component of our hypothesis, the duration of a regime has a significant effect on changes in trade openness, with each additional year of survival accounting for a .174% reduction in a country's average statutory tariffs. The variable measuring a leader's duration in power was not significant, indicating that regime type stability rather than leader tenure may be the key factor.

Models 2 through 7 present a series of robustness checks using average statutory tariffs as the dependent variable. Model 2 uses the Wright–Geddes data for the regime type variables and our own regime duration variable computed from their data. As multiparty autocracies are subsumed in the single-party category in this data set, we expect single-party regimes to be significantly linked with trade openness, and indeed they are associated with more than a 6% reduction in tariff levels. The regime duration variable is also significant and in the expected direction in this model. Note also that using the Geddes–Wright data reduces our observations by about 20%, and so the continuing significance of the results here is an additional indicator of their robustness.

Model 3 makes use of the party number variable from the Cheibub, Gandhi, and Vreeland data set rather than the Hadenius and Teorell regime type data. This new variable is statistically significant in the expected direction, lending support to the first component of our hypothesis. The duration variables in Model 3, however, fail to achieve significance. Model 4 returns to the Hadenius and Teorell data for regime type and regime duration, but substitutes in the Archigos data for leader duration. The indicators of regime types are again significant, but the new measure of leader duration, while in the expected direction, is not statistically significant.

Table 2. The Independent Variables

Variable	*Computation Method*	*Mean*	*Range*	*SD*	*Expectations*
Monarchy	"1" = monarchy (Lagged—H&T data)	0.119	Dummy	0.324	Negative—Trade Openness & Open Positive—IDCR & Statutory Tariff (vis-à-vis multiparty autocracy reference category)
Military	"1" = military regime (Lagged—H&T data)	0.283	Dummy	0.450	Negative—Trade Openness & Open Positive—IDCR & Statutory Tariff (vis-à-vis multiparty autocracy)
Single Party	"1" = single-party regime (Lagged—H&T data)	0.305	Dummy	0.460	Negative—Trade Openness & Open Positive—IDCR & Statutory Tariff (vis-à-vis multiparty autocracy)
No Party	"1" = no party regime (Lagged—H&T data)	0.060	Dummy	0.237	Negative—Trade Openness & Open Positive—IDCR & Statutory Tariff (vis-à-vis multiparty autocracy)
Regime Duration	Lagged regime age in years (H&T data)	22.18	1 to 46	13.03	Positive—Trade Openness & Open Negative—IDCR & Statutory Tariff
Leadership Duration	Lagged regime age divided by number of changes in current leadership (H&T data)	12.92	0.5 to 34	9.38	Positive—Trade Openness & Open Negative—IDCR & Statutory Tariff
Single-Party Wright	"1" = single-party regime (Lagged– Wright data)	0.487	Dummy	0.500	Positive—Trade Openness & Open Negative—IDCR & Statutory Tariff (vis-à-vis other autocracies)
Regime Duration Wright	Lagged regime age in years (computed by authors from Wright data)	22.71	1 to 222	23.30	Positive—Trade Openness & Open Negative—IDCR & Statutory Tariff
Party Number CGV	Lagged parties in legislature 0 = No parties (or no leg.), 1 = 1 party or multiple regime parties, 2 = Multiple parties	1.16	0.826	0, 1, and 2	Positive—Trade Openness & Open Negative—IDCR & Statutory Tariff
Leadership Dur. Archigos	Lagged total leader years in power	9.99	0.1397 to 46.42	9.00	Positive—Trade Openness & Open Negative—IDCR & Statutory Tariff
Leftist Government	"1" = leftist government (Lagged)	0.314	Dummy	0.464	Ambiguous
Lagged lnGDP	Lagged lnGDP	22.65	18.51 to 28.27	1.83	Negative—Trade Openness & Open Positive—IDCR & Statutory Tariff
Δ lnGDP	Differenced lnGDP	0.033	−0.71 to 0.54	0.072	Positive—Trade Openness & Open Negative—IDCR
Lagged GDP per capita	Lagged GDP per capita	2177	81 to 52943	4804	Positive—Trade Openness & Open Negative—IDCR & Statutory Tariff
Δ GDP per capita	Differenced GDP per capita	9.34	−7019 to 5772	463	Positive—Trade Openness & Open Negative—IDCR
Lagged aid as a % of GNI	Lagged foreign aid as a % of gross national income	7.97	−0.47 to 98.74	10.96	Positive—Trade Openness & Open Negative—IDCR & Statutory Tariff
Δ Aid as a % of GNI	Differenced foreign aid as a % of gross national income	0.090	−69.67 to 76.83	5.52	Positive—Trade Openness & Open Negative—IDCR
Lagged Aver. Trade Policy in Region	Average Trade Openness (or IDCR or Statutory Tariff) for a country's region	68.55 (for trade openness)	29.42 to 103.97	14.59	Positive
Δ Average Trade Policy in Region	Differenced average Trade Openness (or IDCR) for a country's region	1.09 (for trade openness)	−10.28 to 17.91	3.81	Positive
Lagged Δ Exchange Rate	Lagged % change in exchange rate vis-à-vis US dollar	1.50	−0.97 to 2628	51.1	Positive—Trade Openness & Open Negative—IDCR & Statutory Tariff
Lagged Energy Production	Lagged logged energy production in kilotons of oil equivalent	9.32	0 to 14.31	1.97	Positive—Trade Openness & Open Negative—IDCR & Statutory Tariff
Lagged Polity	Lagged polity regime score (higher is more democratic)	−4.38	−10 to 9	5.18	Positive—Trade Openness & Open Negative—IDCR & Statutory Tariff

IDCR, import duty coverage ratio.

TABLE 3. Results of the Average Statutory Tariff Models

Variable	*Model 1* *Random Effects with AR1 Correction (N = 544, 84 countries)*	*Model 2* *Random Effects with AR1 Correction (N = 422, 69 countries)*	*Model 3* *Random Effects with AR1 Correction (N = 544, 84 countries)*	*Model 4* *Random Effects with AR1 Correction (N = 544, 84 countries)*	*Model 5* *Random Effects with AR1 Correction (N = 463, 64 countries)*	*Model 6* *Random Effects with AR1 Correction (N = 526, 82 countries)*	*Model 7* *OLS with Panel Corrected Standard Errors and LDV (N = 342, 67 countries)*
Monarchy	2.77 (4.35)			3.65 (4.21)	0.020 (5.08)	1.03 (4.33)	−0.097 (1.27)
Military	7.95 (1.68)***			7.91 (1.68)***	7.85 (1.96)***	5.68 (1.92)***	1.53 (0.730)**
Single Party	5.20 (2.11)**			5.47 (2.08)***	4.03 (2.35)*	4.75 (2.09)**	2.64 (0.841)***
No Party	0.282 (2.36)			0.282 (2.36)	0.979 (2.42)	0.300 (2.28)	4.44 (1.59)***
Single-Party Wright		−6.08 (2.74)**					
Party Number CGV			−2.00 (0.661)***				
Regime Duration	−0.174 (0.102)*		−0.041 (0.098)	−0.141 (0.090)	−0.120 (0.116)	−0.190 (0.104)*	−0.028 (0.025)
Regime Duration Wright		−0.082 (0.048)*					
Leadership Duration	0.064 (.137)		0.023 (0.135)		0.056 (0.155)	−0.069 (0.139)	0.043 (0.070)
Leader Duration Archigos				−0.052 (0.057)			
Leftist Government	2.49 (1.66)	5.46 (2.65)**	2.10 (1.64)	2.33 (1.64)	0.999 (1.87)	1.39 (1.73)	0.365 (0.645)
Lagged Energy Production					−0.755 (0.728)		
Lagged Polity						−0.472 (0.142)***	
Lagged lnGDP	1.11 (0.641)*	0.685 (0.858)	1.05 (0.673)	0.993 (0.639)	1.55 (1.04)	1.49 (0.642)**	0.103 (0.253)
Lagged Δ Exchange Rate	−0.092 (0.070)	−0.113 (0.204)	−0.088 (0.070)	−0.089 (0.070)	−0.070 (0.069)	−0.081 (0.069)	−0.096 (0.020)***
Lagged GDP per capita	−0.001 (0.0002)***	−0.001 (0.0002)***	−0.001 (0.0002)***	−0.001 (0.0002)***	−0.001 (0.0003)***	−0.001 (0.0002)***	−0.0001 (0.00005)**
Lagged Aid as a % of GNI	−0.081 (0.058)	−0.111 (0.095)	−0.086 (0.058)	−0.086 (0.059)	−0.042 (0.062)	−0.037 (0.057)	−0.073 (0.055)
Lagged Mean Statutory Tariff in Region	0.130 (0.049)***	0.110 (0.057)*	0.138 (0.048)***	0.130 (0.049)***	0.130 (0.050)***	0.134 (0.048)***	0.007 (0.038)
R^2	0.368	0.267	0.299	0.362	0.345	0.389	0.906

(*Notes.* ***$p < .01$, **$p < .05$, *$p < .10$. All tests are two-tailed. Standard errors are in parenthesis.)

Table 4. Results of the Trade Openness, IDCR, and Open Models

Variable	*Model 8* *Trade Openness ECM with RE and Robust SE (N = 2098, 112 countries)*	*Model 9* *Trade Openness ECM with RE and Robust SE (N = 1664, 93 countries)*	*Model 10* *IDCR ECM with RE and Robust SE (N = 934, 89 countries)*	*Model 11* *IDCR ECM with RE and Robust SE (N = 806, 76 countries)*	*Model 12* *Open Panel Logit with Decade FE (N = 1508, 92 countries)*	*Model 13* *Open Panel Logit with Decade FE (N = 1336, 83 countries)*
Monarchy	−2.71 (1.28)**		0.101 (0.334)		−6.32 (2.96)**	
Military	−1.20 (0.431)***		0.368 (0.225)[1]		−1.30 (0.597)**	
Single Party	−1.98 (0.572)***		0.774 (0.305)**		−4.54 (0.928)***	
No Party	−0.307 (0.800)		0.046 (0.278)		0.089 (1.35)	
Single-Party Wright		0.996 (0.479)**		−0.015 (0.217)		1.76 (0.947)*
Regime Duration	0.079 (0.026)***		−0.008 (0.009)		−0.085 (0.056)	
Regime Duration Wright		0.008 (0.009)		−0.003 (0.001)**		0.024 (0.013)*
Leadership Duration	0.018 (0.029)		0.012 (0.013)		0.107 (0.058)*	
Leftist Government	0.361 (0.497)	−0.269 (0.473)	−0.248 (0.287)	−0.176 (0.266)	−1.60 (0.903)*	−1.72 (1.29)
Lagged lnGDP	−0.392 (0.219)*	−0.052 (0.196)	−0.063 (0.075)	−0.028 (0.066)	0.684 (0.288)**	1.75 (0.478)***
Δ lnGDP	2.35 (7.60)	3.81 (7.57)	0.101 (2.95)	0.800 (3.17)		
Lagged Δ Exchange Rate	0.005 (0.001)***	0.004 (0.001)***	0.001 (0.0004)**	0.0007 (0.0004)*	−0.006 (0.033)	−0.002 (0.027)
Lagged GDP per capita	0.0002 (0.0001)**	0.0001 (0.00006)**	0.00003 (0.00002)	0.000005 (0.00002)	0.0004 (0.0003)	−0.0004 (0.0004)
Δ GDP per capita	−0.00002 (0.0006)	0.0001 (0.0006)	0.0002 (0.0002)	0.00008 (0.0002)		
Lagged Aid as a % of GNI	0.022 (0.037)	0.031 (0.054)	−0.002 (0.016)	−0.001 (0.017)	0.026 (0.025)	0.045 (0.026)*
Δ Aid as a % of GNI	0.252 (0.065)***	0.378 (0.100)***	−0.206 (0.049)***	−0.166 (0.042)***		
Lagged Average Trade Policy in Region	−0.007 (0.015)	0.003 (0.021)	0.033 (0.020)*	0.060 (0.024)**	0.048 (0.025)*	0.083 (0.031)***
Δ Average Trade Policy in Region	0.770 (0.108)***	0.703 (0.109)***	0.225 (0.080)***	0.220 (0.080)***		
R^2	0.098	0.096	0.047	0.032	N/A	N/A

(*Notes.* IDCR, import duty coverage ratio.
***$p < .01$, **$p < .05$, *$p < .10$, [1]$p = .101$. All tests are two-tailed. Standard errors are in parenthesis.)

Model 5 includes the control variable for energy production; despite the fact that many observations are thereby excluded from the model, the regime type variables remain robustly significant. The new control variable is not, however, significant, and neither are the duration variables. Model 6 controls for the relative level of democracy found among these autocratic countries. It is notable that both the regime type and the regime duration variables remain strongly significant with this control, indicating that they are picking up on something more than just the relative level of democracy in different autocratic regimes. It is also notable that the polity variable itself is strongly significant and indicates that more democratic autocracies have freer trade policies, a finding that is compatible with Milner and Kubota (2005). Finally, Model 7 re-estimates Model 1 within an OLS framework using panel-corrected standard errors and a lagged dependent variable. The lagged variable reduces the observations dramatically, but the regime type variables remain strongly significant and a new variable, *No Party*, also achieves significance for the first time. The duration variables, however, do not achieve significance.

Table 4 presents our robustness tests using differenced trade openness, differenced IDCR, and ''open'' as dependent variables. In Model 8, using trade openness, monarchies, military regimes, and single-party regimes are found to grow their trade volume more slowly than multiparty autocracies, the reference category. Likewise, regime duration is significantly related to growth in trade openness, as expected. Model 9 uses the same dependent variable, but substitutes the Geddes–Wright data. Here, single-party regimes (which include multiparty autocracies) are found to be significantly more open than other forms of autocracy. These models provide especially striking support for the hypotheses because they include many more observations and counties than the primary models, showing that the results are not likely just artifacts of missing data.

Model 10 makes use of the differenced IDCR dependent variable. In this model, single-party authoritarian regimes are found to be significantly more protectionist than multiparty authoritarian regimes, as expected. The other variables on regime type and stability are not significant, although the military variable comes very close. Model 11 uses the Wright–Geddes data to predict differenced IDCR. Here, the regime duration variable is significant and in the expected direction, but the regime type variables do not achieve significance. The final two models use the ''open'' dependent variable and a panel logit specification with random effects and decade dummies. Both of these models provide support for the hypotheses. Model 12 shows that monarchy, military, and single-party regimes are significantly less open than the multiparty reference category and that, for the first time, leadership duration is associated with openness. Model 13 likewise shows a link between openness and both the single-party Wright–Geddes variable (which includes multiparty regimes) and regime duration.

The results for the control variables in both sets of models are mostly as would be anticipated. There is evidence that leftist dictatorships are more protectionist, a finding that is consistent with past research. Currency depreciation is significantly associated with increases in trade openness and decreases in tariff rates, growth in the receipt of foreign aid seems to reduce protectionism (perhaps a result of conditionality), richer countries are more open to trade, and a country's trade policy bears a general similarity to the trade policies of other countries in its region. There is also evidence that larger countries are less trade dependent, not surprising as they are better able to produce a range of commodities domestically. Somewhat strange, however, is the finding that large economies have higher tariffs but are more open as measured by the Sachs and Warner dummy variable. This seeming contradiction may indicate that larger countries rely more on tariff than on non-tariff barriers.

Additional Tests for Robustness and Nonlinearity

How robust are the results to changing some of the estimation decisions that we have made? Dropping the large exchange rate outliers, all of which are experiencing severe currency crises, has no significant impact on the primary results. Running the Wright–Geddes models with single party as the reference category and the others regimes (military, monarchy, and personalistic) included in the model, however, leads to null results for the trade openness and IDCR models. In the statutory tariff model, however, personalistic dictatorships are found to be protectionist vis-à-vis the other systems, and in the open model, military regimes are found to be protectionist. As expected, running the Hadenius and Teorell models with only the multiparty autocracy variable included and the other variables as reference categories produces a statistically significant relationship between regime openness in nearly all the models; only in Models 6 and 10 did the variable fail to reach significance. Running a fixed-effects model with the leadership duration variable (the only primary independent variable that changes enough over time to make such a model a reasonable choice) generally produces insignificant results. It appears, therefore, that cross-sectional differences in duration are necessary for the effects of the variable to be clear; this fact is not very surprising as most of the variation in duration is also found across countries.

We have argued here that authoritarian leaders with large selectorates should tend to prefer more open trade policies. While we believe that we have established that relationship empirically, it is still an open question whether support for free trade increases linearly as selectorates increase or whether it follows a curvilinear trajectory. The linear logic is quite straightforward: as the number of supporters that an autocrat must pay off increases, the incentives to provide public goods also increase. An alternative curvilinear logic is that autocrats with small selectorates can use private goods to purchase the backing of necessary supporters rather cheaply, whereas autocrats with large selectorates need to provide public goods such as free trade to win support. Therefore, it is autocrats with medium selectorates who are most likely to be protectionist; they have more supporters to buy with protectionism than dictators in more politically restrictive systems, but they do not yet have a broad enough base to warrant public goods provision. Note that both the linear and curvilinear arguments are compatible with our identification of free trade with the most politically liberal authoritarian regimes; the only question is whether political liberalism and free trade rise together and fall together linearly, or whether the causal process is more complex.

We leave it to future research to address this question fully, but we do take a first cut at it here. If the relationship is indeed nonlinear, we would expect systems with intermediate selectorate size, such as single-party systems

in the Hadenius and Teorell models, to be the most protectionist. A quick look at the results does not bear out this expectation, as military, monarchy, and no-party regimes all tend to be more protectionist than single-party autocracies. That said, comparing coefficient size is hardly a convincing test, as many regime dummies are not significant in each test and, in any case, the differences between the significant variables are not themselves statistically significant.

A better approach to examining the question is to run the models with a squared selectorate term. We do this using the *Party Number CGV* variable, as this indicator takes on three linear values, allowing us to test directly the impact of medium selectorate size. The results here are somewhat mixed. Including a squared party number term does not produce compelling evidence of a curvilinear relationship for the statutory tariff and trade openness models, but such a relationship does appear in the open models.

To summarize, therefore, all of the evidence points to the relationship between large-selectorate autocracies and free trade. Whether the overall relationship between selectorate size and trade policy is linear or curvilinear (that is, whether medium-selectorate or small-selectorate autocracies are the most protectionist) is still an open question. At this point, we believe that the weight of the evidence inclines toward a more traditional linear argument, but more research will be needed to draw definitive conclusions.

Finally, we also take a first cut at searching for nonlinearity in the regime duration variables by including a squared duration term. The idea is that young and old regimes may have shorter time horizons than middle-aged regimes; young regimes may not be entrenched enough to ensure survival, whereas older regimes may be fragile due to age. If this is true, it may be that middle-aged autocracies are actually the most commercially liberal. We find no evidence for such a curvilinear relationship in our primary models, which use the Hadenius and Teorell data. In the Wright–Geddes models, there does seem to be an increase in protectionism among extremely old regimes, but the relationship is generally linear across the most commonly observed ranges of the duration variable.

Conclusion

In this paper, we apply insights from the political economy of trade to a large class of states that have been understudied—autocracies. We also draw on the current research in authoritarian variation coming out of comparative politics and connect it to an important policy area that it has not before addressed. Overall, our findings show strong support for our hypothesis linking institutionalization in authoritarian regimes, through selectorate size and regime stability, with open trade policy. The evidence indicates clearly that authoritarian regimes do not behave similarly to one another with regard to their trade policies and that it is a mistake to consider such regimes as identical. Using the Hadenius and Teorell data, we find that multiparty regimes have significantly lower levels of trade protectionism than single-party autocracies, monarchies, non-party regimes, and military juntas. As a robustness check, we also find significant support for our hypothesis regarding selectorate size when we use the Wright–Geddes data. In addition, we find evidence using both the Hadenius and Teorell and the Wright–Geddes data for our hypothesis that more stable regimes will, on average, have more liberal trade policies. The effect of individual leader duration appears weaker, but there is some limited evidence of its importance.

More broadly, our research indicates that scholarly understanding of the behavior of authoritarian regimes will need to be tied closely to an examination of their institutions and institutionalization. Perhaps the most fruitful arena for future research will be to focus on the specific preferences of selectorates in different types of autocratic regimes in an attempt to draw a link between selectorate composition and policy outcomes (Pepinsky 2008). Such research could answer the question of how different formal institutions in autocratic systems mediate these preferences in the formation of policy. It could also shed light on the types of selectorates likely to exist in different types of authoritarian regimes. A deeper examination of these questions can extend our knowledge of how autocratic institutions mediate social and elite preferences in the development of policy in a wide variety of areas.

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